

**PRELIMINARY AMENDMENT**  
**NS Entry of PCT/ES2003/000392**

**Please add the following new Abstract of the Disclosure:**

ABSTRACT OF THE DISCLOSURE

The invention relates to a device which is used for the spectral analysis of optical signals and which is based on the stimulated Brillouin scattering effect. The invention also relates to the associated measurement method which makes use of the optical signal amplification caused by the Brillouin scattering effect. The Brillouin scattering effect enables the selective optical amplification of a determined component of the optical spectrum of the signal to be analysed, known as the problem signal, for the measurement thereof with a determined dynamic range, sensitivity and resolution. According to the invention, the problem signal is introduced into an optical fibre together with a narrowband optical signal, known as the probe signal, with a determined wavelength. Said probe signal propagates in the opposite direction to that of the problem signal, such that both signals interact inside the fibre owing to the Brillouin effect.